

**WHAT IS CLAIMED IS:**

- 1 1. An automated system that monitors work-in-process ("WIP") in a manufacturing facility,  
2 comprising:  
3 a software object that determines when an evaluation cycle should be invoked; and  
4 a recommendation wakeup listener object that performs the evaluation cycle, the  
5 recommendation wakeup listener object further including:  
6 a software object that identifies a bottleneck workstation;  
7 a software object that calculates a WIP value representing the amount of work  
8 approaching the bottleneck workstation;  
9 a software object that determines whether the WIP value is projected to fall below a  
10 control limit during an evaluation period; and  
11 a software object that recommends, if the WIP value is projected to fall below the  
12 control limit during the evaluation period, that a selected amount of additional  
13 work be released into the manufacturing line.
- 1 2. The automated system recited in Claim 1, wherein the work approaching the  
2 bottleneck workstation comprises one or more product types.
- 1 3. The automated system recited in Claim 1, wherein the additional work comprises  
2 one or more product types.
- 1 4. The automated system recited in Claim 1 further comprises:  
2 a software object that selects one or more product types for the selected amount of  
3 additional work.
- 1 5. An automated system that controls work-in-process ("WIP") in a manufacturing  
2 facility, comprising:  
3 a software object that determines when an evaluation cycle should be invoked; and  
4 a recommendation wakeup listener object that performs the evaluation cycle, the  
5 recommendation wakeup listener object further including:  
6 an object that identifies a plurality of bottleneck workstations;

an object that calculates a WIP value for each of the plurality of bottleneck workstations, wherein each of the WIP values represents the amount of work approaching the corresponding bottleneck workstation ;  
an object that determines, for each WIP value, whether the WIP value is projected to fall below a control limit during an evaluation period; and  
an object that recommends, if any of the WIP values are projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into the manufacturing line.

6. The automated system recited in Claim 4, wherein the additional work comprises one or more product types.

7. The automated system recited in Claim 4, wherein the work approaching the corresponding bottleneck workstation comprises one or more product types.

8. A method of controlling work-in-process ("WIP"), comprising:  
providing a software object that determines when an evaluation cycle should be invoked; and  
providing a recommendation wakeup listener object that performs the evaluation cycle, the providing recommendation wakeup listener object further includes:  
providing a software object that identifies a bottleneck workstation;  
providing a software object that calculates a WIP value representing the amount of work approaching the bottleneck workstation;  
providing a software object that determines whether the WIP value is projected to fall below a control limit during an evaluation period; and  
providing a software object that recommends, if the WIP value is projected to fall below the control limit during the evaluation period, that a selected amount of additional work be released into the manufacturing line.

9. The method recited in Claim 8 further comprises:  
providing a software object to select one or more product types for the selected amount of additional work.

10. The method recited in Claim 8, wherein:

2 providing a software object to identify a bottleneck workstation further comprises  
3 employing a software object to identify one or more of a plurality of  
4 bottleneck workstations.

1 11. The method recited in Claim 8, wherein :  
2 providing a software object to calculate a WIP value representing the amount of work  
3 approaching the bottleneck workstation further comprises employing a  
4 software object to calculate a WIP value for each of a plurality of bottleneck  
5 workstations, wherein each of the WIP values represents work approaching  
6 the corresponding bottleneck workstation.

1 12. The method recited in Claim 8 wherein:  
2 providing a software object to determine whether the WIP value is projected to fall  
3 below a control limit during an evaluation period further comprises employing  
4 a software object to determine whether any of a plurality of WIP values is  
5 projected to fall below the control limit during the evaluation period.

1 13. The method recited in Claim 8, wherein:  
2 providing a software object to recommend, if the WIP value is projected to fall below  
3 the control limit during the evaluation period, that a selected amount of  
4 additional work be selected for the bottleneck workstation further comprises  
5 employing a software object to recommend, if the WIP value associated with  
6 each of a plurality of bottleneck workstations is projected to fall below the  
7 control limit during the evaluation period, that a selected amount of additional  
8 work be released into the manufacturing line.